

## ONE NEW SPECIES OF THE GENUS *EVYNNIS* FROM CHINA (PERCIFORMES, SPARIDAE)

GUAN Zhe-Cheng, TANG Wen-Qiao\*, WU Han-Lin

Laboratory of Ichthyology, Shanghai Ocean University, Key Laboratory of Exploration and Utilization of Aquatic Genetic Resources, Ministry of Education, Shanghai 201306, China

**Abstract** This paper describes a new species of the genus *Eynnys*, collected from Minnan-Taiwan bank fishing grounds, China, named *Eynnys mononematos* sp. nov.

***Eynnys mononematos* sp. nov.** (Figs 2–4)

Holotype, No. A000055, SL 56.0 mm, collected from Taiwan bank fishing grounds, in July 1975. Paratypes: 16 specimens, SL 51.8–65.7 mm. No. A006731, A023348, from Waixie fishing ground in July 1975; A000062, A008116, A022418, A023353, from Taiwandui fishing ground in July 1977; A000056, A000059, A006528, A006530, from Taiwan bank fishing ground in July 1975; A000054, A000057, A000058, A000061, A000063, A023359, from Jimai in June 1963. Type specimen have been deposited in Laboratory of Ichthyology, Shanghai Ocean University.

Description. D, XII, 10; A, III, 9; P, 15; V, I, 5; branched caudal fin rays 17–18; pored lateral line scales 54–62; scales above and below lateral line 5.5–6.5/14–15. Body depth in standard length 2.0–2.2 (2.1), head length 2.8–3.1 (2.9), caudal

peduncle length 5.6–6.2 (5.9), predorsal length 2.1–2.3 (2.2), prepelvic length 3.7–4.3 (4.1), pectoral fin length 3.3–4.0 (3.5), pelvic fin length 3.7–4.3 (4.1), snout length in head length 3.0–3.4 (3.1), eye diameter 2.7–3.1 (2.8), interorbital space 3.3–3.6 (3.5), caudal peduncle depth 1.3–1.5 (1.4) in its length.

Remarks. The new species is similar to its congeners *E. cardinalis* and *E. tumifrons* in upper and lower jaw dentitions, the number of anal fin rays and none of scales on preopercular limb. However, the new species is distinct from *E. cardinalis* and *E. tumifrons* in the extension of the third and 4<sup>th</sup> dorsal fin spine. As is observed, the new species has a long extension of the third dorsal fin spine only (up to 49.7%–67.4% of body length), whereas in *E. cardinalis*, both the third and 4<sup>th</sup> dorsal fin spines are extended (the length of the third dorsal fin spine accounts for 37.0%–55.6% of body length). In contrast, *E. tumifrons* has no extension at all in the third dorsal fin spine, which is as long as 20.0%–33.3% of body length.

**Key words** Perciformes, Sparidae, *Eynnys*, new species.

## 中国犁齿鲷属鱼类一新种 (鲈形目, 鲷科)

管哲成 唐文乔\* 伍汉霖

上海海洋大学鱼类研究室, 水产种质资源发掘与利用教育部重点实验室 上海 201306

**摘要** 记述了采自闽南-台湾浅滩渔场的鲷科鱼类 1 新种, 单棘犁齿鲷 *Eynnys mononematos* sp. nov.。新种的犁骨有数颗圆锥状小齿, 为犁齿鲷属所特有的特征。其背鳍仅第 3 鳍棘末端呈显著的丝状延长这一特征可与本属已知种 *E. cardinalis* 和 *E. tumifrons* 相区别。

**关键词** 鲈形目, 鲷科, 犁齿鲷属, 新种。

**中图分类号** Q959.483

犁齿鲷属 *Eynnys* 是 Jordan 和 Thompson (1912)

根据犁骨有较钝的圆锥形齿、前鳃盖骨无鳞、臀鳍

\* Corresponding author, E-mail: wqtang@shou.edu.cn

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鳍条数为9等有别于鲷科其他种类的特征,于1912年创立的一个属。该属分布于西太平洋的中国、日本、朝鲜半岛、越南、菲律宾、印度尼西亚等海域和澳洲西北部海域,目前已记录的2个种在我国黄海、东海和南海均有分布(王存信,1989;樊冀蓉等,2011)。在整理保存于上海海洋大学鱼类研究室的鲷科鱼类标本时,发现了犁齿鲷属1新种,定名单长棘犁齿鲷 *Eynnus mononematos* sp. nov.。

# 1 单长棘犁齿鲷,新种 *Eynnus mononematos* sp. nov. (图2~5)

正模标本1尾,编号A000055,全长66.8 mm,体长56.0 mm,1975年7月采自台湾浅滩(23°2'~23°6'N, 118°25'~118°50'E)。

副模标本16尾,全长65.0~80.6 mm,体长51.8~65.7 mm。编号A006731, A023348, 1975年

7月采自外斜渔场(22°26'~22°36'N, 118°21'~118°47'E), 编号A000062, A008116, A022418, A023353, 1977年7月采自台湾堆渔场(22°38'~22°44'N, 117°39'~117°49'E), 编号A000056, A000059, A006528, A006530, 1975年7月采自台湾浅滩(23°2'~23°6'N, 118°25'~118°50'E), 编号A000054, A000057, A000058, A000061, A000063, A023359, 1963年6月采自集美(24°36'N, 118°6'E)。标本采集地(图1)。以上模式标本均用10%福尔马林液保存于上海海洋大学鱼类研究室标本馆。可量性状用游标卡尺丈量,背鳍前距为吻端至第1背鳍起点的直线距离,腹鳍前距为吻端至腹鳍起点的直线距离,胸鳍长为胸鳍基部至末端的距离,腹鳍长为腹鳍基部至末端的距离,其它性状依成庆泰、郑葆珊(1987)。

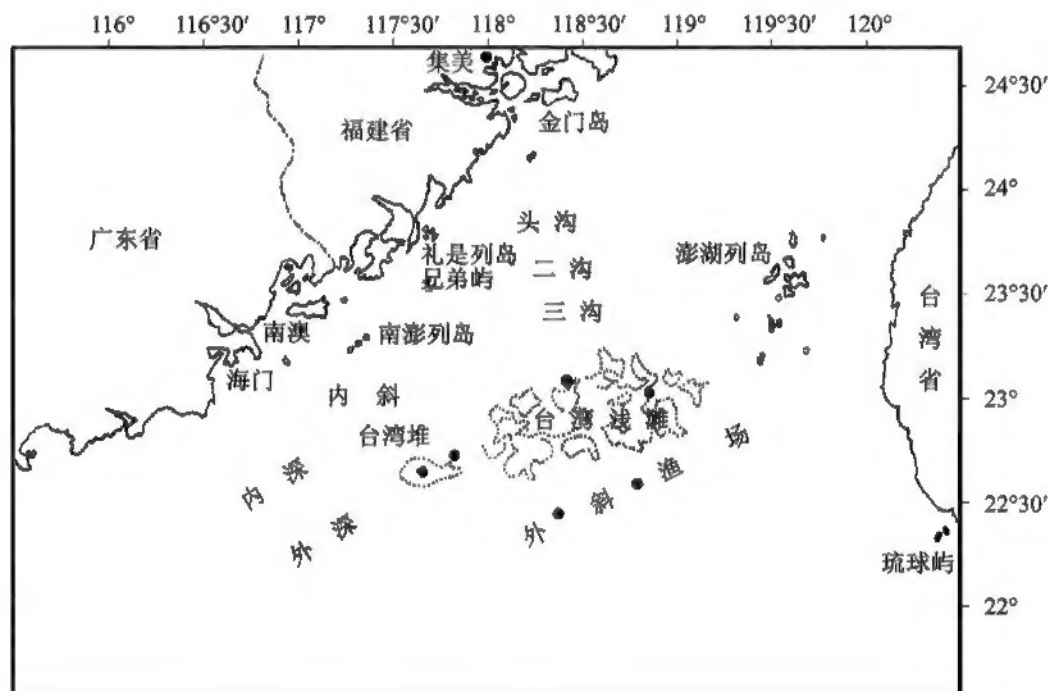


图1 单长棘犁齿鲷的模式标本采集地分布图, ●标本采集点

Fig. 1. Sampling Locality of the type specimen of *Eynnus mononematos* sp. nov., ● Collecting sites of the specimen.

背鳍XII, 10; 臀鳍III, 9; 胸鳍15; 腹鳍I, 5; 尾鳍分枝鳍条17~18。侧线鳞54~62  $\frac{5.5 \sim 6.5}{14 \sim 15}$ 。脊椎骨数24。

体长为体高的2.0~2.2(平均2.1)倍,为头长的2.8~3.1(2.9)倍,为尾柄长的5.6~6.2(5.9)倍,为背鳍前距的2.1~2.3(2.2)倍,为腹鳍前距的2.5~2.9(2.7)倍,为胸鳍长的3.3~4.0(3.5)倍,为腹鳍长的3.7~4.3(4.1)倍。头长为

吻长的3.0~3.4(3.1)倍,为眼径的2.7~3.1(2.8)倍,为眼间距的3.3~3.6(3.5)倍。尾柄长为尾柄高的1.3~1.5(1.4)倍。

体呈长椭圆形而稍短,侧扁,身体较高,背缘隆起度大于腹缘,尾柄侧扁。头中大,前端圆钝,头长小于体高。吻钝而短。眼大,侧上位,距吻端略小于距鳃盖后上角。眼间隔宽凸,略小于眼径。鼻孔每侧两个,位于眼眶前缘,前后相距较近;前鼻孔较小,圆形,具鼻瓣膜;后鼻孔较大,长圆形。口前位,

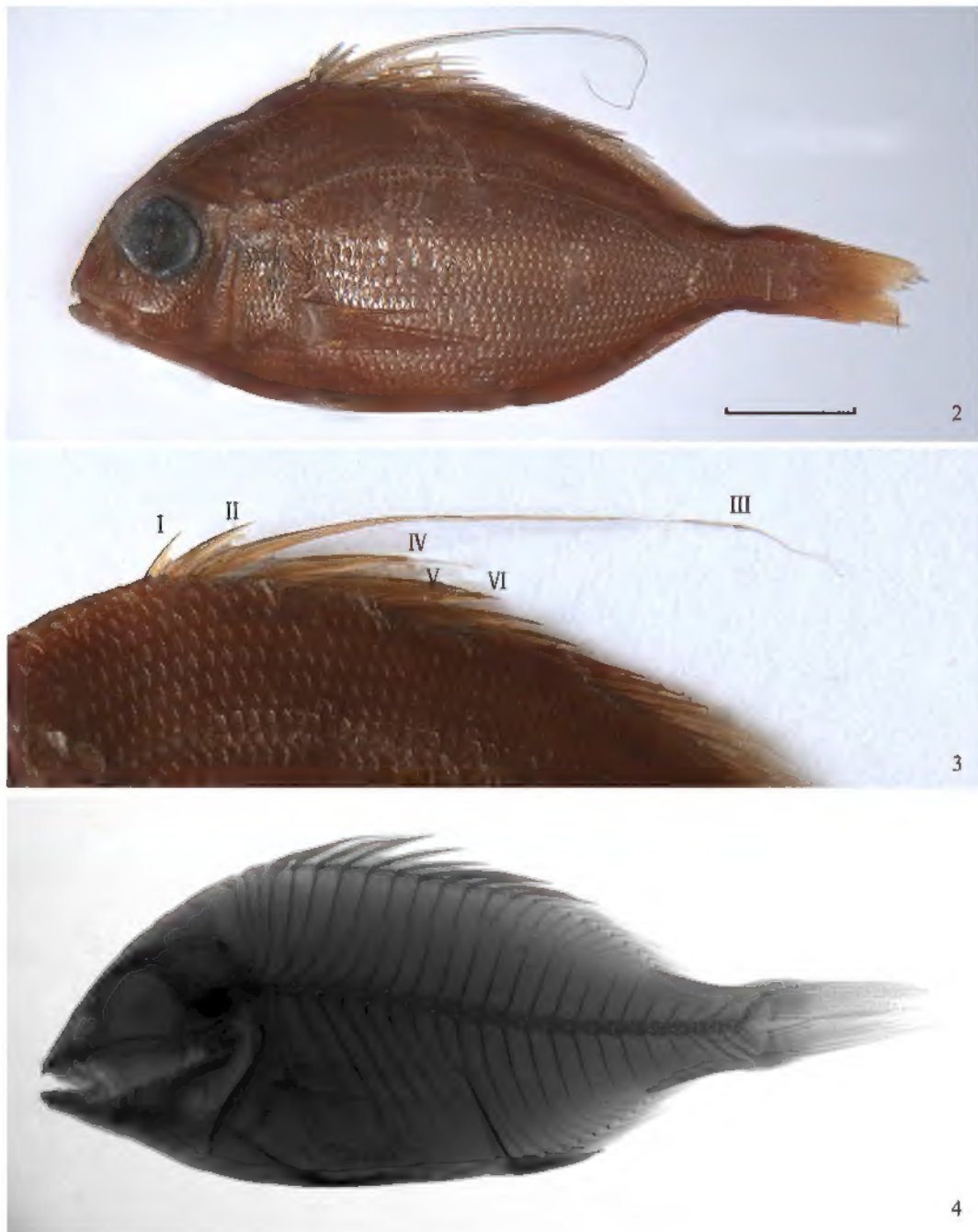


图 2~4 单长棘犁齿鲷, 新种 *Erymnis mononematos* sp. nov.

2. 侧面观 (lateral view) 3. 末端呈丝状延长的第 3 鳍棘 (dorsal fin showing the third dorsal fin spine extended) 4. X 光透视照片, 骨骼系统 (X-ray photo showing the skeletal system) 比例尺 (scale bars) = 1 cm

位甚低, 略小。唇薄, 上下颌约等长, 上颌骨向后伸达眼中部下方。颊部无明显颊孔。上颌骨前端有较大的犬齿 4 枚, 其内侧缘有众多不规则的粒状齿群, 两侧有臼齿 2 列; 外列前部数齿稍尖, 中部为较大的臼齿, 后部有 1 列小白齿; 内列前部为颗粒状齿带, 后部为较大臼齿。下颌近前端有 6 枚较大的犬齿, 其内侧有不规则的小锥齿和粒状齿群, 两侧有 2 列臼齿, 外列和内列约等大, 外列后部有 1 列较小臼

齿。犁骨顶端有数粒圆锥形小齿。腭骨及舌上均无齿 (图 5)。鳃孔宽大, 鳃盖膜分离不与峡部相连。前鳃盖骨后缘光滑, 鳃盖骨后缘具 1 扁平钝棘。鳃盖条骨数 5。鳃耙不发达, 较短而细扁, 鳃耙数 6~7 + 12~13, 最长鳃耙约为眼径长度的 1/4。

体被中等弱栉鳞, 不易掉落。头部除吻端和前鳃盖骨外均被鳞。头背部有鳞区域伸达眼间隔中部, 颊部具鳞 5 行; 背鳍和臀鳍鳍棘部基底具鳞鞘, 鳍条

表 1 三种犁齿鲷属鱼类性状比较  
Table 1. Comparison of characters of *E. mononematos* sp. nov. with *E. Cardinalis* and *E. tumifrons*.

	单长棘犁齿鲷, 新种 <i>E. mononematos</i> sp. nov.	二长棘犁齿鲷 <i>E. cardinalis</i>	黄犁齿鲷* <i>E. tumifrons</i>
测量标本数 Specimen	17	9	12
采集地 Locality of collection	闽南-台湾浅滩鱼场	海南三亚、白马井	日本
体长/体高 Body depth in SL	2.0~2.2 (2.1)	1.8~2.1 (2.0)	2.1~2.2 (2.2)
体长/头长 Head length in SL	2.8~3.1 (2.9)	3.2~3.4 (3.3)	2.9~3.2 (3.1)
头长/吻长 Snout length in head length	3.0~3.4 (3.1)	2.9~3.0 (3.0)	2.0~2.8 (2.5)
头长/眼径 Eye diameter in head length	2.7~3.1 (2.8)	3.0~3.2 (3.1)	2.6~3.1 (2.9)
尾柄长/尾柄高 Caudal peduncle depth in its length	1.3~1.5 (1.4)	1.0~1.3 (1.2)	1.5~1.8 (1.7)
背鳍起点 Predorsal	胸鳍基部上方或略前	胸鳍基部上方	胸鳍基部上方略后
胸鳍末端 End of pectoral fin	伸达臀鳍起点上方	到达臀鳍鳍条部上方	伸达臀鳍起点上方
鳃耙数 No. of gill raker	6~7+12~13	7~8+11~12	7~8+12~13
侧线鳞 Lateral line scales	54~62	58~64	58~61
侧线上鳞 Scales above lateral line	5.5~6.5	6~7	6.5
背鳍第3 鳍棘 Third dorsal fin spine	显著丝状延长	丝状延长	不显著延长
背鳍第4 鳍棘 4th dorsal fin spine	不延长	丝状延长	不显著延长
体长/背鳍第3 鳍棘 Third dorsal fin spine in SL	1.5~2.0 (1.8)	1.8~2.7 (2.2)	3.0~5.0 (4.0)
体长/背鳍第4 鳍棘 4th dorsal fin spine in SL	4.9~6.1 (5.3)	2.3~3.3 (2.9)	-
分布 Distribution	已知: 闽南-台湾浅滩鱼场	中国; 日本, 朝鲜半岛, 菲律宾	中国; 日本, 朝鲜半岛, 印度尼西亚

\* 数据引自 Iwatsuki *et al.*, 2007.

部基底具细鳞。侧线完整, 始于鳃盖骨后上方, 到达尾鳍末端, 位较高, 弧形, 与背缘基本平行。  
背鳍 1 个, 起点位于胸鳍基部上方略前, 鳍棘部与鳍条部相连, 中部无缺刻, 具 12 鳍棘, 10 鳍条; 第 1 鳍棘短, 约为第 2 鳍棘长度的 1/2, 第 3 鳍棘末端呈丝状延长, 其长度可达体长的 49.7 % ~ 67.4 %, 第 4 鳍棘较眼径略长 (图 3)。X 光照片显示, 在背鳍第 1 鳍棘的支鳍骨前, 有 3 块游离的“T”字形背鳍前支鳍骨 (图 4)。臀鳍具 3 鳍棘, 9 鳍条, 起点位于背鳍第 11~12 鳍棘下方, 第 2 鳍棘中大, 细长, 约与眼径等长。背鳍鳍条部后缘和臀鳍的后缘外廓较尖。胸鳍位低, 尖长形, 末端超过肛门到达臀鳍起点上方。腹鳍胸位, 具 1 鳍棘, 5 鳍条, 末端到达肛门, 腹鳍基部具 1 长腋鳞。尾鳍浅叉形, 分枝鳍条 17~18。

福尔马林固定和保存的标本呈棕黄色, 体侧无明显条纹或斑点。背鳍边缘颜色较深, 其余各鳍颜色均与体色一致。  
新种目前已知仅分布于闽南-台湾浅滩鱼场。  
**2 分类讨论**  
Jordan 和 Thompson (1912) 以 *Sparus cardinalis* Lacepède, 1803 为模式种于 1912 年建立了 *Evynnis* 属, 后来 Tanaka 发表了分别采自日本和中国的 1 个新种 *Evynnis japonica* Tanaka, 1931。最近, Iwatsuki *et al.* (2007) 认为 *Chrysophrys tumifrons* Temminck *et* Schlegel, 1843 也属于 *Evynnis* 属, 但 *E. japonica* 是 *E. tumifrons* 的同物异名。因此, *Evynnis* 属目前仅有二长棘犁齿鲷 *E. cardinalis* (Lacepède, 1802) 和黄犁齿鲷 *E. tumifrons* (Temminck *et* Schlegel, 1843) 2 种。



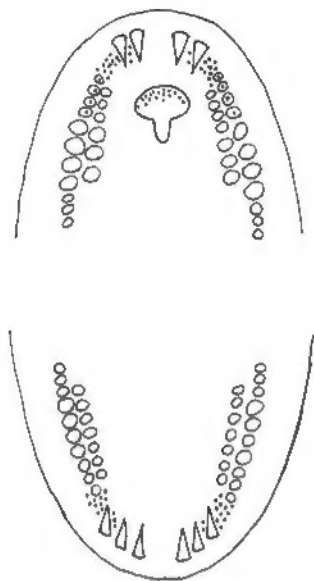


图5 单长棘犁齿鲷上下颌齿和犁骨齿  
Fig. 5. Maxillary dentition, mandibular dentition and vomer teeth of *Erynnis mononematos* sp. nov.

新种的上下颌齿类型、排列方式,以及前鳃盖骨无鳞、臀鳍鳍条数等均与 *Erynnis* 属已知种 *E. cardinalis* 和 *E. tumifrons* 相似。但 *E. cardinalis* 背鳍的第3~4 鳍棘均呈丝状延长,第3 鳍棘长为体长的37.0 % ~55.6 %,且体较高,侧线鳞数也略多。*E. tumifrons* 的背鳍起点略靠后,且背鳍第3 鳍棘不显著延长,仅为体长的20.0 % ~33.3 % (表1)。而新种仅第3 鳍棘显著延长,其长度为体长的49.7 % ~67.4 %。

犁齿鲷属种类检索

- 1 (4) 背鳍具显著延长呈丝状的棘
- 2 (3) 背鳍第3~4 棘均呈丝状延长 ..... 二长棘犁齿鲷 *E. cardinalis* (Lacepède)

- 3 (2) 背鳍仅第3 棘呈丝状延长 ..... 单长棘犁齿鲷,新种 *E. mononematos* sp. nov.
- 4 (1) 背鳍棘不延长呈丝状 ..... 黄犁齿鲷 *E. tumifrons* (Temminck et Schlegel)

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